

ABSTRACT

This invention provides a process for producing biodiesel fuel from vegetable or animal oils and fats or wastes thereof and methanol that does not use a catalyst and does not generate glycerin as a by-product. In this process, vegetable or animal oils and fats or wastes thereof are mixed with methanol, and a methanolysis reaction is carried out at a reaction temperature of between 370°C and 500°C, a reaction pressure of between 20 MPa and 60 MPa, and a reaction period of between 4 minutes and 12 minutes without the use of a catalyst. This invention also provides biodiesel fuel that is mainly composed of fatty acid methyl esters, monoacylglycerol, and diacylglycerol.